

REMARKS

The Office Action dated February 22, 2006, has been received and carefully considered. In this response, claims 1, 48, 49, 82, 102, 108, 124, 127, 154, 177 and 190 have been amended. Entry of the amendments to claims 1, 48, 49, 82, 102, 108, 124, 127, 154, 177 and 190, is respectfully requested. Reconsideration of the outstanding rejections in the present application is also respectfully requested based on the following remarks.

Applicants note with appreciation the indication on page 23 of the Office Action that claims 121-123 are allowed. Likewise, Applicants note with equal appreciation the indication on page 23 of the Office Action that claims 16, 79 and 181-183 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have opted to defer rewriting the above-identified claims in independent form pending reconsideration of the amendments and arguments presented below.

I. THE ANTICIPATION REJECTION OF CLAIMS 1-5, 7-11, 17-19, 24, 25, 29, 30, 32-35, 49-54, 56-58, 63-68, 72, 77, 78, 81, 102-105, 107, 124-133, 138-149, 177-180, 184-190, 192, 194, 195 AND 197

On page 3 of the Office Action, claims 1-5, 7-11, 17-19, 24, 25, 29, 30, 32-35, 177-180, 184-190, 192, 194, 195 and 197

were rejected under 35 U.S.C. § 102(b) as being anticipated by Goforth (U.S. Patent No. 5,419,877). On page 6 of the Office Action, claims 49-54, 56-58, 63-68, 72, 77, 78, 81, 102-105, 107, 124-133 and 138-149 were rejected under 35 U.S.C. § 102(b) as being anticipated by Goforth. These rejections are hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id.. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id..

Although Applicant does not agree with the pending rejections, Applicant has nonetheless amended the claims to

clarify the claimed systems and methods and better distinguish the cited references. Each of independent claims 1, 49, 82, 102, 108, 124, 127, 154, 177 and 190 has been amended to recite that "the acoustic field is modulated according to different frequency and amplitude modulation ranges." Applicant respectfully submits that none of the cited references teach or suggest any feature or functionality wherein the acoustic field is modulated according to different frequency and amplitude modulation ranges.

Accordingly, Applicant respectfully submits that independent claims 1, 49, 82, 102, 108, 124, 127, 154, 177 and 190, as amended, are allowable over the cited references.

Claims 2-48, 50-81, 83-101, 103-107, 109-120, 125-126, 128-153, 155-176, and 178-189 are dependent upon independent claim 1, 49, 82, 102, 108, 124, 127, 154, 177 or 190. Thus, since independent claim 1, 49, 82, 102, 108, 124, 127, 154, 177 or 190 should be allowable as discussed above, claims 2-48, 50-81, 83-101, 103-107, 109-120, 125-126, 128-153, 155-176, and 178-189 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination. For example, claim 2 recites wherein the acoustic generator of claim 1 is further defined as an array of sound

sources mounted along the duct to produce a plurality of acoustic fields in the fluid passageway of the duct. Applicant respectfully submits that none of the cited references - alone or in combination - teach or suggest the apparatus of claim 1 wherein the acoustic generator is further defined as an array of sound sources mounted along the duct to produce a plurality of acoustic fields in the fluid passageway of the duct.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 1-11, 15, 17-19, 20-22, 24-26, 29-36, 42-44, 49-58, 62-69, 72-75, 77, 78, 81, 82-85, 90, 97, 102-105, 107-109, 117, 119, 124-133, 138-149, 154-180, 184-190, 192, 194, 195 and 197 be withdrawn.

IV. THE OBVIOUSNESS REJECTION OF CLAIMS 1-8, 12-15, 17, 19-23, 25-28, 30, 32-35, 37-57, 59-63, 67-71, 73-77, 80, 82-120, 124-176, 190-191 AND 193-196

On pages 9-23 of the Office Action, claims 1-8, 12-15, 17, 19-23, 25-28, 30, 32-35, 37-57, 59-63, 67-71, 73-77, 80, 82-120, 124-176, 190-191 and 193-196 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eng (U.S. Patent No. 3,643,623) in view of Vicard (U.S. Patent No. 6,171,366); Goforth; Goforth in view of Vicard; Goforth in view of Wojtowicz (U.S. Patent No. 6,322,613); Goforth in view of Chang (U.S.

Patent No. 6,451,094); or Eng in view of Vicard further in view of Chang. These rejections are hereby respectfully traversed.

As stated in MPEP § 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant respectfully submits that the obviousness rejections of claims 1-8, 12-15, 17, 19-23, 25-28, 30, 32-35, 37-57, 59-63, 67-71, 73-77, 80, 82-120, 124-176, 190-191 and 193-196 have been overcome by the amendments and remarks set forth in connection with the anticipation rejection of claims 1-5, 7-11, 17-19, 24, 25, 29, 30, 32-35, 49-54, 56-58, 63-68, 72, 77, 78, 81, 102-105, 107, 124-133, 138-149, 177-180, 184-190, 192, 194, 195 and 197.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 1-8, 12-15,

17, 19-23, 25-28, 30, 32-35, 37-57, 59-63, 67-71, 73-77, 80, 82-120, 124-176, 190-191 and 193-196 be withdrawn.

III. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

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